

Remarks

Claim Status

Claim 1-27 are pending in the application. Claims 1, 10, 11, 12, 13, 15 and 16 are amended. Claims 17-27 are newly presented.

(Claims 1 and 15 were initially amended and claims 17-27 were presented in applicants' May 22, 2002 Preliminary Amendment. It appears that the preliminary amendment was not entered so we have amended the claims anew and have provided a copy of the Preliminary Amendment for the examiner's convenience.)

Claims 1 and 11 are amended without any prejudice.

Claims 12, 13 and 16 are amended in an editorial fashion and not in response to the art or any formal requirement.

Claim 15 is amended along the lines as amended in the Preliminary Amendment, prior to the outstanding rejections, and not in response to the art or any formal requirement.

Claim 10 is amended to broadly direct its scope to a "computer."

Drawings Objection

The specification at paragraph 22 has been amended to include reference number 110 shown in Fig. 1

Reference number 38 is mentioned in paragraph 92 so no drawing change is believed necessary.

Paragraph 92 has been amended to include mention of Fig. 5 as suggested by the Examiner.

Withdrawal of the drawing objections is respectfully requested.

Specification Objections

We appreciate the Examiner's suggestions regarding a few typos and grammatical improvements in the specification. We made a few changes as generally suggested by the Examiner. We have also made a few similar changes to tidy up the specification as well.

We have also amended the specification to include patent and publication numbers.

Formal Rejection under 35 U.S.C. § 112

We respectfully traverse the rejection of claim 3.

We respectfully submit that the terms “do not relate” finds ample support in the specification as filed, e.g., at paragraph 92. We believe that one of ordinary skill in the art would be able to ascertain a standard for relating the first and second metrics based on the teachings in the specification and the knowledge available at the time of filing.

Withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 101

We respectfully traverse the rejection of claim 10 as not reciting statutory subject matter.

Nevertheless, in order to simplify issues for this amendment, we have directed the scope of the claim to a computer. The term “computer” is broadly intended and may cover a variety of apparatus, e.g., audio or video players, handheld or desktop computers, networked or wireless devices, etc., etc.

Art-based Rejections

Claims 1 and 4-14 stand rejected as being anticipated by U.S. Patent No. 6,064,764 (hereafter referred to as “the Bhaskaran patent”).

Claims 15 and 16 stand rejected as being anticipated by U.S. Patent No. 6,330,672 (hereafter referred to as “the Shur patent”).

Claims 2 and 3 are rejected as being unpatentable over the Bhaskaran patent in view of U.S. Patent No. 5,930,369 (hereafter referred to as “the Cox patent”).

We respectfully traverse these rejections.

Claim 1

Claim 1 recites a method of authenticating media. The media includes a digital watermark including a first metric. The first metric includes a measure or characteristic corresponding to the digital watermark. Support for this feature can be found throughout the specification including, e.g., paragraphs 83 and 92.

The digital watermark is decoded to obtain the first metric, and the digital watermark is analyzed to determine a second metric. The first metric and the second metric are compared to determine whether the media has been altered.

The cited passages of the Bhaskaran patent embed an image dependent hash (H). The cited passages do not contempt that an embedded metric includes a measure or characteristic corresponding to a digital watermark, in combination with other features of claim 1. Instead, the Bhaskaran patent's watermark includes a hash (H) corresponding to a host image.

We respectfully request that claim 1 be allowed.

Claim 11

Claim 11 recites (in combination with other features) a digital watermark having a message. The message includes a measure or characteristic corresponding to the digital watermark signal. Support for this feature can be found throughout the specification including, e.g., paragraphs 83 and 92.

Once extracted the message is compared to the digital watermark to measure degradation of the digital watermark.

As discussed above the cited passages of the Bhaskaran patent discuss embedding an image dependent hash (H). The cited passages do not contempt that an embedded message includes a measure or characteristic corresponding to a digital watermark, in combination with other features of claim 11. Instead, the embedded hash (H) corresponds to a host image.

We respectfully request that claim 11 be allowed.

Claim 10

Claim 10 recites a computer including a digital watermark embedder. The embedder includes an embedding module to embed a benchmark in a media signal. The benchmark includes a watermark signal characteristic. The benchmark is to be included in the watermark signal embedded by said embedder.

Instead of embedding a benchmark including a watermark signal characteristic, the Bhaskaran patent suggests embedding an image-dependent hash (H).

We respectfully request that claim 10 be allowed.

Claim 15

Claim 15 was originally and editorially amended in our above-mentioned Preliminary Amendment and not in response to the June 17, 2005 Office Action. As such, it appears that the examiner did not have an opportunity to consider a digital watermark being designed to be lost or to predictably degrade upon predetermined signal processing, in combination with the other features of claim 15.

Moreover, we respectfully disagree with the Examiner's interpretation of the Shur patent (Col. 8, lines 56-62) at Col. 8, lines 56-62. Instead of teaching generating a metric based on a detected digital watermark, the cited passage discusses information that may be included in a function for creating a signature. See also Col. 10, lines 1-10.

Thus, while the cited passage discusses information that can be used in creating a signature, it does not teach or suggest generating a metric based on a detected digital watermark in combination with other features of the claims.

We respectfully request that claim 10 be allowed.

New Claim 19 and 25

Newly presented independent claims 19 and 25 are also believed to be patentable over the cited art. Similar claims were originally presented prior to the June 17, 2005 Office Action.

Claim 19 recites embedding a digital watermark in a media signal; analyzing the digital watermark embedded in the media signal to determine a baseline state for the digital

watermark; embedding first information in the media signal, the first information corresponding to the baseline state of the digital watermark; and embedding second information in the media signal, the second information corresponding to a rendering channel through which the media signal will be rendered.

Claim 25 recites embedding a digital watermark in a media signal, the digital watermark being designed to be lost or to degrade upon at least one form of signal processing; determining a metric for the embedded digital watermark, the metric comprising a benchmark for the embedded digital watermark; embedding the metric in the media signal; and embedding data in the media signal, the data indicating how the metric was determined.

Favorable consideration is respectfully requested.

Dependent Claims

Many of the dependent claim are also believed to recite additional patentable combinations in there own right. Favorable reconsideration is requested.

Information Disclosure Statement

An Information Disclosure Statement and Form 1449 are provided herewith. Consideration of the information disclosed therein is respectfully requested.

We also understand that the art considered in our parent applications will also be considered in this application according to MPEP 609.

Conclusion

The application is believed to be in condition for allowance. Nevertheless, the Examiner is invited to telephone the undersigned if any question remains. (The many other deficiencies of the art need not be belabored at this time.)

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Respectfully submitted,

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